a plurality of peripheral gas inlet jets positioned at at least two elevations along the elongated dimension of the housing for introducing gas at an angle to the elongated dimension of the housing to promote mixing of the raw materials in suspension.

2. (Amended) The fluidized bed reactor of claim 1 wherein the reactor housing has a conical section circumscribing the reaction zone with the reduced diameter of the conical section at its lower end interfacing with the gas and/or solids inlet.

3. (Amended) The fluidized bed reactor of claim 2 including a residue collection housing mating at one end with the conical section of the reactor housing and having an inclined lower wall for directing a reaction process residue from the conical section to a residue collection port through which the residue can be extracted from the fluidized bed reactor.

7. (Amended) The fluidized bed reactor of claim 3 including a sparger surrounding at least a portion of the residue collection housing for introducing gas within the residue collection housing to maintain reaction process residue below a given size in suspension and directed back into the conical section while enabling agglomerates of reaction process residue above the given size to drop towards the collection port.

9. (Amended) The fluidized bed reactor of claim 7 wherein the incline of the lower wall of the residue collection housing is designed so that the gravitational forces on the residue above the given size will overcome the wall friction and travel to the collection port.

10. (Amended) The fluidized bed reactor of claim 1 wherein the plurality of peripheral gas inlet jets are directed at a downward angle to a line perpendicular to the central axis of the reactor housing.

12. (Amended) The fluidized bed reactor of claim 7 wherein the central gas inlet, the plurality of peripheral gas inlet jets and sparger are structurally formed so that approximately 30% of a fluidizing gas is introduced through the central gas and/or solids inlet, approximately 65% of the fluidizing gas is introduced through the plurality of peripheral gas inlet jets, and 5% of the fluidizing gas is introduced through the sparger.

13. (Amended) The fluidized bed reactor of claim 1 including control valves in fluid communication with a fluidizing gas supply and respective ones or groups of the plurality of peripheral gas inlet jets for individually controlling the quantity of gas passing through the respective plurality of peripheral gas inlet jets.

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